

TRUE COST OF THE

FOR NEW HOMES IN
MICHIGAN

2009 INTERNATIONAL ENERGY CONSERVATION CODE
INFORMATIONAL ENERGY CONSERVATION CODE

Homes are the biggest investment we make—and everyone deserves a home that meets national minimum energy efficiency standards. While it's true that homeowners can always improve the efficiency of their homes, it is far more cost-effective to upgrade building components during construction, putting in better windows or swapping out one grade of insulation for a better one. Here's what buyers get with the 2009 IECC:

Lighting: \$50

Payback Period

2 years

2-year Profit

2 years

Annual Energy Reduction

2 years

5

\$930.73



Duct Sealing and
Testing: \$350

Insulation Upgrades
CLIMATE ZONE 5: \$442
CLIMATE ZONE 6: \$780
CLIMATE ZONE 7: \$1,703

Climate Zone 5

R-value: 21 < 30
Roof
Floor
Basement

Climate Zone 6

R-value: 21 < 30
Roof
Floor
Basement

Climate Zone 7

R-value: 21 < 38
Roof
Floor
Basement



Dedicated to the adoption, implementation, and advancement of building energy codes.

For the full Incremental Cost Analysis study, please visit bcap-ocean.org

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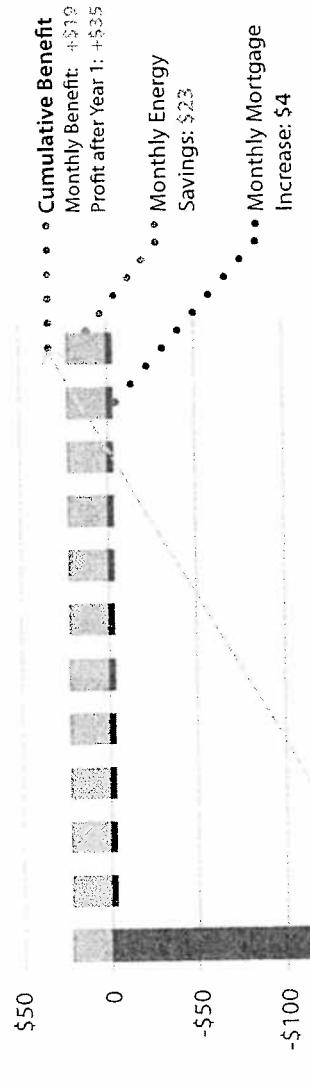
2009 INTERNATIONAL ENERGY CONSERVATION CODE

One of the major barriers to energy code adoption across the country is the concern that new codes will add to the purchase price and potential buyers will not be able to afford the homes they want. In Michigan, upgrading homes to the 2009 International Energy Conservation Code will actually reduce out-of-pocket expenses for homeowners – paying off their initial investment in a matter of months.

For the average new home, BCAP estimates the costs of the new code will add a total of \$965 in construction costs—an increase of only 0.4%. When this amount is rolled into the average mortgage, real costs to homebuyers will mean a down payment increase of \$193.04, and \$4.17 extra on monthly mortgage bills.

These added mortgage costs will be offset, however, by monthly energy savings of \$22.83, helping homebuyers pay off their initial investment in only eleven months. After breaking even in month eleven, the home will return buyers a profit of \$19 per month—for a total return of \$228 every year. This return on investment is graphed below and presented as a balance sheet at right.

Energy Code Payback for Michigan Single Family Homes



\$18 profit every month ↓
• Down Payment Increase: \$193
• Monthly Energy Savings: \$23
• Monthly Mortgage Increase: \$4.17

This model assumes an average sale price of \$267,451 for a 2,400 square foot home. The mortgage is conservatively set at 30 years, with 20% down and the current average nationwide interest rate of 5.05%. With a lower down payment—such as 10% down—consumers will break even on their investment even sooner.

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12
11
10
9
8
7
6
5
4
3
2
1
Month